

IN THE CLAIMS

[Please amend the claims as follows:]

1 *SAC* 1. (amended) Method for identifying a momentary acoustic scene, said method
2 including
3 - an extraction, during an extraction phase, of characteristic features from an
4 acoustic signal captured by at least one microphone (2a, 2b), and
5 - an identification, during an identification phase, of the momentary acoustic
6 scene on the basis of the extracted characteristics,
7 wherein at least auditory-based characteristics are identified during the extraction phase.

1 2. (amended) Method as in claim 1, wherein, for the identification of the
2 characteristic features during the extraction phase, Auditory Scene Analysis (ASA)
3 techniques are employed.

1 2 3. (amended) Method as in claim 1, wherein, during the identification phase, Hidden
Markov Model (HMM) techniques are employed for the identification of the momentary
acoustic scene.

1 2 3 4 4. (amended) Method as in claim 1, wherein at least one of the following auditory
characteristics are identified during the extraction of said characteristic features: loudness,
spectral pattern, harmonic structure, common build-up and decay processes, coherent
amplitude modulations, coherent frequency modulations, coherent frequency transitions and
binaural effects.

1 5. (amended) Method as in claim 1, wherein any other suitable characteristics are
identified in addition to the auditory characteristics.

1 6. (amended) Method as in claim 1, wherein the auditory and any other characteristics
are grouped along Gestalt theory principles.

1 7. (amended) Method as in claim 6, wherein the extraction of characteristics and/or
2 the grouping of the characteristics are performed either in context-free or in context-sensitive
3 fashion, taking into account additional information or hypotheses relative to a signal content
4 and thus providing an adaptation to the acoustic scene

1 8. (amended) Method as in claim 1, wherein, during the identification phase, data are
2 accessed which were acquired in an off-line training phase.

1 9. (amended) Method as in claim 1, wherein, the extraction phase and the
2 identification phase take place in continuous fashion or at regular or irregular time intervals.

1 10. (amended) Application of the method per one of the claims 1 to 9 for tuning a
2 hearing device to a momentary acoustic scene.

1 11. (amended) Application as in claim 10, wherein, on the basis of a detected
2 momentary acoustic scene, a program or a transmission function between at least one
3 microphone (2a, 2b) and a receiver (6) in the hearing device (1) is selected.

1 12. (amended) Application as in claim 10, wherein any other available function can
2 be triggered in the hearing device (1) on the basis of the identified momentary acoustic scene.

1 14. (amended) Hearing device (1) with a transmission unit (4) whose input end is
2 connected to at least one microphone (2a, 2b) and whose output end is functionally connected
3 to a receiver (6), characterized in that an input signal of the transmission unit (4) is
4 simultaneously fed to a signal analyzer (7) for an extraction of at least auditory
5 characteristics, that the signal analyzer (7) is functionally connected to a signal identifier unit
6 (8) in which a momentary acoustic scene is identified, and that the signal identifier unit (8) is
7 functionally connected to the transmission unit (4) for the selection of a program or a
8 transmission function.

1 17. (amended) Hearing device (1) as in claim 16, characterized in that the user input
2 unit (11) is functionally connected to the control unit (9).

1 18. (amended) Hearing device (1) as in claim 14, characterized in that it is provided
2 with suitable means serving to transfer parameters from a training unit (10) to the signal
3 identifier unit (8).